AMENDMENTS TO THE SPECIFICATION

Please replace the paragraph beginning at page 2, line 2, with the following rewritten paragraph:

The flame detection system shown in Figure 1 comprises an analogue black and white video camera, 1, which outputs a standard 625 line analogue video signal at a 25Hz frame rate to a frame grabber card 2. Cameras are widely available and the inventors are using a standard VHS video camera from Hitachi. The frame grabber card [[digitizes]] digitizes the image to a resolution of 640 pixels per lime with 480 lines and passes the [[digitised]] digitized image into the processor, 3, at the frame rate. The frame grabber card is a standard piece of hardware and a National Instruments PCI 1411 device plugged into the PCI bus of a standard PC is used. The processor 3, comprises a standard IBMTM PC using a 750Hz Intel Pentium 3TM processor with 128Mbytes of RAM. The processor executes the algorithm, which is coded in a mixture of LabViewTM and MicrosoftTM Visual C++. The processor outputs an alarm signal, 4, by means of a standard serial RS232 link. This output may be used in a number of obvious ways to indicate a fire alarm event.

Please replace the paragraph beginning at page 2, line 20, with the following rewritten paragraph:

In step 1, the video image [[is]] entered into the algorithm is in the form of a monochrome 640 x 480 image where each image pixel has an intensity value of 8 bits resolution. The algorithm processes each pixel individually, using linear mathematical operations.